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ABSTRACT

This publication contains three papers originally presented at the 1991 convention of the University Council for Educational Administration (UCEA), which examine the changing professoriate in educational administration. In "The Creation of Constructive Conflict Within Educational Administration Departments," Walter H. Gmelch discusses the issues that educational administration chairs must recognize in order to resolve conflicts within their departments, and focuses on the role of department chairs as mediators of conflict. "Improving the Quality of Schooling: The Deming Philosophy and Educational Administration," by Jess E. House, proposes that professors of educational administration adopt Deming's organizational-management philosophy to transform American schooling. In "The Role of Professors in Shaping the Institutional Bases of an Educational Reform: The Cases of School-Based Management," Rodney T. Ogawa and E. Ann Adams present findings of a study that was part of a larger study that described how school-based management was developed and promoted in the United States. This paper focuses on the role of college and university professors in that process. References accompany each chapter. (LMI)

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THE CHANGING PROFESSORIATE IN EDUCATIONAL ADMINISTRATION

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THE CHANGING PROFESSORIATE IN EDUCATIONAL ADMINISTRATION

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Rodney T. Ogawa and E. Ann Adams

IN MEMORIAM

This volume year of the *UCEA Monograph Series* is dedicated to the memory of John Prasch. John was a longtime friend of UCEA, a UCEA partnership superintendent, professor at the University of Nebraska-Lincoln, and a reviewer for these publications.

FOREWORD

Members of the Editorial Board have selected papers for inclusion in this UCEA Monograph Series on the general theme of "The Changing Professoriate in Educational Administration" They were originally presented at the 1991 Convention of the University Council for Educational Administration in Baltimore. Larry L. Dlugosh, Ronald G. Joekel, Barbara Y. LaCost, and Ruth E. Randall, all faculty members of the University of Nebraska-Lincoln, reviewed the manuscripts and selected the papers for this issue. Their time, effort, analysis of the manuscripts, and thoughtful contributions are deeply appreciated.

Frederick C. Wendel, Editor
Lincoln, Nebraska
April, 1993

CHAPTER 1

The Creation of Conctructive Conflict within Educational Administration Departments

Walter H. Gmelch
Washington State University

Current forces are transforming higher education: changing student clientele, disintegrating college curriculum, growing technological changes, and shifting attitudes and practices of faculty (Keller, 1983). This transformation is especially important for the hundreds of chairs of educational administration departments responsible for adapting, developing, and leading their programs into the decade of reflection and reform. Progress, change, and reform cannot be made without conflict, and nothing is as important for educational administration departments than the emergence of department chairs equipped to handle conflict created by these challenges.

The popularity and urgency of the educational reform movement places department chairs in a difficult position. One of the major impediments to reform is conflicting faculty values and interests. In order to foresee and respond effectively to pressures for reform, chairs need to be equipped with constructive conflict management skills. This paper focuses on the issues necessary for educational administration chairs to recognize and resolve conflicts within their departments.

Background

In 1990, the UCEA Center for the Study of the Department Chair conducted a survey of department chairs in 101 research and doctoral granting colleges and universities across the United States which included

51 UCEA institutions and 50 non-UCEA institutions. Eight department chairs were selected from each institution, stratified by eight discipline classifications of hard vs. soft, applied vs. pure, and life vs. non-life, resulting in a sample of 808 chairs. All UCEA educational administration department chairs were selected as well as a matched sample of non-UCEA educational administration chairs (Gmelch & Carroll, 1991).

This study was undertaken to expand the theoretical and practical understanding of department chairs regarding the stresses and conflicts associated with chairing academic departments. Not surprisingly, chairs identified conflict with colleagues as the major category of stress. Over 40% of the department chairs suffered excessive stress from "making decisions affecting others, resolving collegial differences, and evaluating faculty performance" (Gmelch & Burns, 1991). In contrast, only 17% of the chairs complained of excessive stress from resolving differences with deans and 5% with students. Thus, chairs suffered from more interpersonal conflict with their colleagues than with their deans or students. Overall, no other chair activities produced as much stress as these faculty-based responsibilities.

Conflict and Department Chair Satisfaction

In this study, chairs also described when they felt most dissatisfied with their jobs. Second only to bureaucratic red tape and paperwork was the chairs' frustration with interpersonal conflict. Sixty percent of their dissatisfaction came from dealing with their colleagues, which emanated from the following sources of faculty conflict.

Inter-faculty conflict. Most of the chairs' dissatisfaction came from faculty disagreeing among one another which resulted in "bickering, whining, and feuding," "acting without reason," or "ideological and personal wars."

Faculty attitude. Chairs felt disappointed when faculty were seen as "unimaginative, apathetic, disengaged" colleagues, who "are recalcitrant and no longer focused on the mission" and "do not measure up to their potential."

Unsupportive faculty. Another source of conflict for chairs surfaced when faculty did not support the direction of the department, e.g. "chairs

dealing with faculty resistance to improvements and change," "faculty acting unreasonably (and selfishly) thereby causing turmoil and compromising the achievement of departmental objectives," and "when interpersonal differences between faculty inhibit the mission of the department and . . . basically work against the good of the department."

Unsupportive chair. Chairs also expressed remorse when they could not support their faculty and had "to make decisions which cause great disappoint to my colleagues," and "when I can't, or don't, have the resources to reward good faculty."

Role of evaluation. Although evaluation is inherent in their role, chairs reported difficulty in having to "evaluate their colleagues," "conduct annual reviews," "make tough decision on merit evaluations and salaries, "and "fire faculty."

Role of mediation. Finally, the chairs' role in mediating conflict between their colleagues caused them to be dissatisfied. One chair expressed concern over "severe faculty confrontations" and another expressed difficulty "when I have to referee bad interpersonal relations between faculty."

The other 40% of conflict situations causing chair dissatisfaction stemmed from higher level administrators. Chairs commented about the "frustration from *lack of support*" or "*unresponsiveness* from higher administration," and "when higher-up administrators do *not share information* upon which decisions affecting my department are made." Another concern came from chairs' frustration when "higher administration requires what seems to be *excessive paperwork*" or "*unrealistic deadlines*" and "requesting reports that are never responded to." Finally, chairs felt conflict with higher level administrators when they had *opposing values*, felt *unappreciated* for the work that has been done or successes accomplished, and when their recommendations or *input* were *not accepted*.

The chairs' lament over conflict and dissatisfaction with their interpersonal interactions draws attention to the need to handle conflict in more constructive and satisfying ways in order for departments to face the challenge of educational reform.

Department Chairs and Conflict Management

What is the first word that "conflict" evokes? Most chairs develop images of controversy, disagreement, or differing opinions between faculty members. While negative images of conflict may predominate, is controversy necessarily undesirable? Emotional responses to conflict may be positive (excitement, enjoyment, stimulation, curiosity, creativity, commitment, involvement), negative (anger, distrust, resentment, fear, rejection), or even neutral (change or a different point of view).

No matter what the answer or reaction, one of management's main functions is to adjudicate conflicting demands (Katz & Kahn, 1978). How should department chairs view conflict within their departments? The answer rests in the 1980s approach to the management of conflict: what has been termed a principled approach. Principled conflict management promotes integrity and high standards in the resolution of disputes such that both parties exhibit righteous, upright, and trustworthy principles in attempting to satisfy both parties' differences. The use of "tricky tactics" has given way to a more honest, open, principled approach. In essence, the principled approach views conflict as a necessary and encouraged condition of administration. While in the 1970s a review of managerial practices found few administrators employing principled philosophy (Robbins, 1974), over the past decade more successful administrators have recognized that in many instances conflict can be a sign of a healthy academic organization. In addition, the recent popularity of the Harvard Negotiation Project has influenced a broader use of principled conflict resolution as espoused by Roger Fisher and William Ury (1983).

The following sections address conflict management with these objectives in mind: (a) *recognize* the nature and causes of conflict; and (b) *resolve* conflict through the principled approach to achieve mutually acceptable educational reform.

Conflict Recognition

The first step a chair must take toward a positive and constructive conflict style is to recognize the nature and causes of conflict in the department and

the university or college. Unfortunately, most people take conflict personally and believe that if they are involved in controversy it must be due to their personality. As Tucker (1984) pointed out, many chairs feel that for some reason conflict is their fault. Even though chairs may not like to talk about conflict, they need to accept the idea that it occurs and will be inevitable if change is to take place in educational administration.

A review of the research on organizational conflict reveals 10 structural relationships which actually can create conflict and barriers to educational reform. Educational administration chairs who are striving to renew their programs must recognize these roles and organizational barriers. They must understand that such barriers are built into the structure of institutions of higher education. As chairs, they need to realize that regardless of the causes, chairs have the responsibility to confront these barriers to facilitate effective reform (Gmelch & Carroll, 1991).

Levels. As the size of an organization increases, goals become less clear, interpersonal relationships become more formal, departments become more specialized, and the potential for conflict intensifies. These assumptions have been supported by research in educational organizations. Corwin (1969) found that 83% of the schools with six or seven levels of authority reported high rates of disagreement between faculty and administrators as contrasted to 14% in schools with three or fewer levels of authority. Not unexpectedly, as the administrative line-authority in universities increases, the potential for conflict between the echelons also increases. Thus, chairs must strive to flatten the hierarchy and to promote and implement changes needed for reform.

Rules and regulations. Generally, as job structure increases the amount of role certainty increases, thus reducing *inter*personal conflict between employees. However, with greater job structure, employees also feel greater *intra*personal role conflict since they become confined by routinization, rules, and regulations. In higher education, where faculty have a great deal of autonomy, the potential for interpersonal conflict increases since roles and expectations become less clear and more difficult to monitor and supervise. On the flip side, this autonomy also reduces their potential intrapersonal conflict. The key is to capture the energy from autonomy and synergistically transform it into productive ideas for educational reform.

Degree of specialization. In a study of schools, high degrees of specialization increased the intensity of conflict. Therefore, secondary schools segmented into departments suffer more conflict than homogeneous elementary schools. Higher education institutions, with departments housed in separate buildings, experience more conflict than secondary schools. This, of course, does not presuppose that elementary schools represent a more positive working environment than colleges; conflict can also cause positive outcomes. Nevertheless, chairs need to use the creative conflict from specializations to enrich the discussion of the reform agenda.

Staff composition. Established groups have been found to develop more constructive conflict than ad hoc committees (Hall & Williams, 1966). Therefore one would expect high staff turnover to stimulate conflict within organizations (Robbins, 1974). Given that faculty tend to be less mobile in higher education than personnel in other professions, their stability may be a factor in reduced departmental conflicts. While a homogeneous staff may experience less interpersonal conflict than a heterogeneous group, the conflict generated in a mixed group may result in more productive and healthy changes.

Nature of Supervision. The closer one is supervised, the more conflict will be created. While this may be true, what is the desired outcome of close supervision? If change is required in employee behavior, then close supervision may be necessary to affect positive results. Faculty in higher education plan and control their own work and work style, and as long as they produce the desired results in teaching, research, and service, close supervision may create unnecessary tension. How does a chair, however, shake up an entrenched faculty resistant to exploring new ways of preparing educational administrators?

Participation in Decision Making. Faculty assume they will and should participate in departmental decision making. Interestingly, as the level of participation increases, the amount of conflict also increases, especially where value differences exist and when educational administration departments attempt to change 'sacred' programs. The assumption behind participatory decision making, however, is that the quality of the decisions will increase with more input. While this assumption may be true in most

cases, there are definitely tradeoffs among efficiency, effectiveness, and program implementation.

Sources of Power. French and Raven (1968) suggest five bases of social power. In essence, department chairs can influence the reform movement through several sources: (a) through the authority vested in the position (legitimate power); (b) through their ability to provide rewards and recognition (reward power); (c) punishment and withholding rewards (coercive power); (d) through their knowledge and skills (expertise power); and/or (e) through their ability of personal persuasion (referent power). The use of expertise and referent power (personal sources) yields greater satisfaction and performance of the staff than coercive power (Yukl, 1981). Normative organizations such as universities and colleges rely predominantly on symbols rather than coercion or financial reward to influence employees. Leaders in these organizations, department chairs in particular, use formal control by virtue of both their personality and position to motivate and coordinate their colleagues (Etzioni, 1964). In fact, "low and moderate levels of power . . . can assist in improving coordination and, therefore, work to reduce conflict. But where power is excessive, as perceived by a less powerful group, one may expect it to be challenged, causing increased conflict" (Robbins, 1974, p. 48). Additionally, faculty hold exceptional power due to their professionalism; their expertise can critically contribute to the success or failure of reform.

Rewards and recognition. Rewards and recognition also contribute significantly to conflict. When a differential reward structure is used for two or more groups or departments, conflict is likely to occur. This conflict is even more prevalent if groups perceive they are competing for the same or limited resources. If a fixed sum of merit increases must be divided among faculty, chairs will likely encounter conflict between and among colleagues. In other words, the more rewards emphasize separate performance rather than combined performance, the greater the conflict (Walton & Dutton, 1969). Faculty, who mostly teach in isolation and solitarily publish manuscripts, find themselves in competition for and in conflict over the limited resources for reward and recognition. Therefore, the faculty collectively must buy into the reform package and equally reap its benefits.

Interdependence. In much the same way that differentiated reward and recognition create conflict, a limited amount of resources to be shared among colleagues sets the stage for increased conflict. When one faculty member's gain is another's loss, faculty believe that the allocation of resources is a "zero-sum" game, and the department is destined for conflict. Also if faculty must rely on each other, or one department relies on another department, or one academic course builds on another, conflict may result. In his work on conflict, Simmel (1955) concludes that conflict will occur when the activities of one group have a direct consequence on another group's ability to achieve its goal. Therefore, departmental reform will necessitate faculty interdependence and result in some tension between faculty as they become dependent on each other to achieve the desired results.

Roles and responsibilities. Managers, who perform liaison or linkage roles in organizations, often find themselves in role conflict situations (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Academic department chairs encounter even greater role conflict since they are in a somewhat unique position without common management parallels. Department chairs are plagued with inherent structural conflict since they must act as the conduit of information and policy between the administration and the faculty of the institution (Lee, 1985; Milstein, 1987). Ambiguity and role conflict results from attempting to bridge the administrative and academic cores of the university which are organized and operated differently (Bare, 1986). The academic core of teaching and research operates freely and independently in a loosely-coupled system, whereas the managerial core maintains the mechanistic qualities of a tightly-coupled system. The department chair is at the heart of the tension between the two systems. While this dynamic conflict between administrators and academics is critical to maintain higher education organizations, it does place department chairs in a difficult position, mediating the demands of administrators and faculty. Chairs may feel trapped between the pressure to perform as a faculty member and as an administrator. These pressures unique to departmental chairs result in a paradoxical dilemma much like the Greek god, *Janus*, who had two faces. Chairs are seen with both faculty member and administrator faces. This posture leads to split loyalties and mixed commitment on the part of chairs to continue with reform efforts in the shadow of conflict.

In summary, a review of the research of educational institutions reveals 10 work relationships which inevitably increase the intensity of conflict among colleagues. Higher education institutions are potentially plagued with conflict due to their many levels, rules, regulations, specialized disciplines, heterogeneous staffing, participatory decision-making, segmented rewards, high interdependence, use of authoritative positional power, and the Janus position of department chairs.

Educational administration chairs must recognize the nature of conflict, not to debate whether the conflict from these organizational characteristics is negative or positive, but to realize the influence it has in shaping the acceptance or rejection of reform.

Conflict Resolution

In order to structure constructive debate regarding educational reform, chairs must strive to satisfy faculty interests and concerns in the name of reform. Several questions can provide a framework for analyzing how to bargain and develop the reform agenda (Raiffa, 1982).

1. Are there more than two points of view? Visualize two faculty members sitting across the table from one another discussing the possible merger of their two courses in order to develop a new and innovative course needed for the reform program. The question is whether both of them represent all the interests and concerns which should be considered, or are other constituencies and interested parties lined up behind each of them, essentially forming a 'vertical' team. While both may agree on the terms of a merger, they may have forgotten to consult their vertical teams—other faculty, staff, students, and, most importantly, practicing administrators. Before entering into an agreement, each of the parties must consider the vertical team behind them.

2. Are the faculty teams monolithic? Rather than an exception, each side of a proposal is probably not internally monolithic. This question concerns faculty "horizontal" teams—faculty sitting side-by-side on the same side of the issue or proposal. Are both faculty members monolithic in their

interests? Probably not. Take the classic case of the defending attorney and client. Both want resolution to the problem, but the client's interest may be to resolve the case immediately to take care of bills, relieve time pressures, and other interests. The attorney, who may be paid by clock hours or a percentage of the settlement, may want to hold out for a larger portion of the settlement.

3. Are there linkage effects? One agreement may have an effect on another. If a chair agrees to release one faculty member to prepare a proposal, the same principles should be used for the next request. The chair's decisions, therefore, should be based on sound and defensible principles.

4. Is there more than one issue? Multiple-issue problems require trade-offs and often present difficult analytical challenges. If multiple issues exist, develop a hierarchy from which faculty can analyze each issue against one another and make their trade-offs.

5. Is ratification among faculty required? Several methods of decision making can be used, from leader-centered to group-centered. If conflict is likely among alternative proposals, the final decision should be taken to faculty for ratification or endorsement.

6. Are threats possible? While physical threats are highly unlikely, tenured faculty have a great deal of power and can make reform difficult if they do not concur. Chairs need to consider the possible threats that may surface from unilateral decisions.

7. Are negotiations public or private? What faculty state in an open faculty meeting may have significantly more impact than what they might negotiate one-on-one behind closed doors. Statements made in public forums that later are retracted may cause a loss of face and reputation.

8. Is there a time constraint or time-related cost? Clearly, the closer one is to a deadline, such as the beginning of an academic year, the more powerful is the need to come to closure. For example, when the North Vietnamese came to Paris to seek a settlement to the Vietnam War, they rented a house on a two-year lease and let that fact be known. The party who has to negotiate in haste is disadvantaged.

Answers to these questions can help departments organize their thoughts and search for solutions to the reform question. Overall, chairs must be

cautious that the *relationship* between faculty should not be indiscriminately sacrificed to benefit *reform*. Fisher and Ury (1983) of the Harvard Negotiation Project discovered methods to confirm and expand this assumption. They believe any method of resolution may be fairly judged by three criteria: (a) It should produce wise agreement (outcome); (b) It should improve or at least not damage the relationship between the people involved; and (c) It should be efficient. The first and second criteria reiterate the importance of *relationships and reform*. The third criteria suggests a measure of expediency and effectiveness.

Substance or wise outcome is that which "meets the legitimate interests of each side to the extent possible, resolves conflicting interests fairly, is durable, and takes community interests into account" (Fisher & Ury, 1983, p. 4). The most common form of resolution is achieved through a process of positioning and repositioning which may or may not take into consideration the true interests of both parties. While it does serve the purpose of telling the other side what one wants and where one stands, positioning fails to meet the basic criteria of the Harvard Negotiation Project. In fact, arguing over positions produces unwise agreements, is inefficient, and endangers ongoing relationships.

The Department Chair As Mediator

The preceding discussion on resolution may lead chairs to believe that their primary role in conflict resolution is to negotiate an equitable settlement, while protecting the interests of all parties at the same time. This assumes that chairs, personally, are in conflict with faculty over reform. Chairs should recognize their important role in assisting with the resolution of conflict *between* faculty as well. In addition to developing negotiation skills, chairs should also understand the roles and skills required to mediate faculty conflict.

While the role of negotiator often is intuitively understood, the mediation process requires different functions and skills. Chairs as mediators need to perform the roles of conflict assessor, process convener, resource expander, reality tester, and active listener.

The mediation process itself follows a different resolution pattern than the traditional negotiation session. As developed by several resolution centers in the Western world, mediation follows a distinctive procedure (Lincoln & O'Donnell, 1986; Moses & Roe, 1990). Mediation is as much a science as an art. If chairs accept their role of mediator, eight generic procedures should be used in the mediation process (Gmelch & Miskin, 1993).

1. Clarify the chair's role as mediator. A mediator's main role is to get both sides to suggest solutions and not to make the final decision. Therefore, chairs should be impartial and facilitate the presentation of facts, feelings and reform proposals. In order to do this, they must remain objective and represent both sides of the disagreement; use supportive and non-judgmental language; and create a non-threatening environment where the faculty feel comfortable and safe in expressing themselves, their needs, and their aspirations. Chairs must also help the faculty understand each other's needs and interests and facilitate a mutually acceptable reform package.

2. Invite opening statements from the faculty. Have each of the faculty members or groups separately make opening statements as to their expectations of the reform process. Reinforce that this process is voluntary and can be terminated at any time.

3. Develop presentation of issues and feelings. Like in a court of law, have the charging faculty go first and lay out the facts and feelings of their side of the case. The others then share their side of the story. The chair's responsibility is to listen actively and have faculty generate data.

4. Clarify and elaborate the facts. At this point, chairs may ask for clarification of perceptions and verification of the facts as stated by each faculty member. They may need to ask for more detail on specific issues and even have faculty members repeat what was said as a means of sorting out errors in understanding. Through the use of summarization and paraphrasing, chairs should ensure appreciation and understanding of all points of view.

5. Help the faculty move toward resolution. Assess whether all faculty are willing to begin the reform process. In a full faculty meeting session or by private caucus, chairs must ask for proposals or points on which all can agree; then help faculty isolate the issues which need to be resolved. Chairs should realize that

mediation may extend over a period of several work sessions, with caucusing and perception-checking taking place between sessions.

6. Solicit suggestions and contributions. Have each faculty member or group of faculty equally contribute to solutions which may satisfy all their needs. The more they develop their own solution, the more likely they will be committed to the reform.

7. Reality test solutions. Once faculty have proposed solutions, the chair should ask how and based on what criteria they arrived at them. How would the suggested solution satisfy the other faculty's interests? Remember, interest satisfaction must be resolved if reform is to be achieved.

8. Summarize agreement and commitment. The chair should summarize what has been agreed to and commit faculty to it, preferably in writing. Each faculty member must leave with a clear picture of what has been achieved and what each person is obligated to do. While some conflicts over reforms may not be totally resolved, they may be better managed in the future because of the mediation process.

Finally, congratulate all faculty members and reinforce anything they have found useful in developing the current reform proposal. Remember, a mediator has to be objective, neutral, and nonaligned with either party (Moses & Roe, 1990). This neutrality role poses some problems if faculty have disproportionate power bases and abilities to articulate their cases. The chair must then assume a role in encouraging the less vocal faculty to speak up and express needs, for the minority opinions of today may be the majority tomorrow.

Ingredients for Satisfying Resolution

Regardless of the approach chairs use to resolve conflict in their departments, whether it be mediation or negotiation, the key is in its durability. Will the reform stand up over time? The long-term solution comes from each party's sense of satisfaction in three areas: procedural satisfaction, substantive satisfaction, and psychological satisfaction (Lincoln & O'Donnell, 1986). If faculty have a high degree of dissatisfaction

in any of these three areas, the reform agreement developed may be short lived and result in conflict aftermath. In order to avoid conflict aftermath, chairs must make sure that all three levels of satisfaction are reached.

Procedural Satisfaction. The basic questions for procedural satisfaction is whether faculty were satisfied with the reform proceedings—before, during, and after. Who initiated the process? Where did the meetings take place? Who was involved? Faculty must feel they had control over the process and were not forced into any unusual, uncomfortable, or disadvantageous situations. The ultimate test of procedural satisfaction is whether faculty would use the same process again.

Substantive Satisfaction. Faculty must feel a sense of adequate resolution. This can only happen if a reasonable level of interest satisfaction is achieved. The key to substantive satisfaction is not in the development of the ultimate reform package but in an acceptable level of satisfaction for all faculty.

Psychological Satisfaction. A balance between faculty relationships and reform must be achieved if faculty are to be psychologically satisfied. If department members feel better after developing the reform proposals than before, psychological satisfaction has most likely occurred. Rather than feeling like a winner or loser, each faculty member should have a sense of equity in the resolution and ownership in the solution. Psychological blackmail is less likely to occur and compliance with the solution will be achieved.

Conclusion

The purpose of this article is to expose educational administration departments to the issues surrounding conflict management and help chairs organize their departments for programmatic reform. This is not an article on how to win in battle against faculty, but how to deal with interests such that the chair and faculty find satisfying resolution while enjoying mutual respect and maintaining positive and productive relationships. If chairs believe the principles discussed here will help them, they should share them with their faculty. Unlike most other strategies, if the other side becomes

equally skilled, agreement becomes easier, not more difficult to reach. The next step is the department's. As a wise Chinese philosopher once said: *To know, and not to use, is not yet to know.*

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CHAPTER 2

Improving the Quality of Schooling: The Deming Philosophy and Educational Administration

Jess E. House
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The concerns and issues found in American education are rich in variety and complexity*quality*. Each of ten fastbacks recently published by the Phi Delta Kappa Educational Foundation include the term "restructuring" in the title. In the latest of the series, Kelley and Surbeck (1991) aptly describe the essentials of school restructuring as empowering those in the schooling process "so that they can reexamine their purposes and operational strategies in order to improve the quality of schooling for all" (p. 8). In another of the ten fastbacks, McCarthy (1991) points out that an "organizational and administrative framework will have to be created" that will support restructuring and empowerment (p. 7). Because purpose, process, and a supportive framework are integral parts of the management philosophy of W. Edwards Deming, adoption of the Deming philosophy by professors of educational administration is proposed as a means which can lead to the transformation of American schooling. This paper reviews the philosophy's major elements and provides examples of the challenges it makes to conventional schooling.

The greatest contribution to an understanding of the improvement of quality, and arguably, of leadership and management in the late twentieth century was made by W. Edwards Deming, a statistician. Prior to the adoption of quality improvement methods introduced by Deming to Japanese industrialists, "Made in Japan" was synonymous with inferior quality and cheap goods. Deming's work in Japan fostered a revolution in quality, in

economic productivity, and in thinking about management. As American firms saw their market share shrink in the face of competition from well-made imports, many of them sought to improve the quality of their products and services by studying and applying the Deming philosophy.

Deming shows the direction for a transformation of American management. Transformation of management practices and beliefs, in turn, results in changes in organizational structure, changes in relationships among those connected with the organization, and changes in all of the processes used in attaining the organizational purpose. The question of interest is not about the need for transformation and change, but rather the extent to which the Deming philosophy applies to management in education.

Assuming that adoption of the Deming philosophy can lead to the transformation of schools as well as organizations in the private sector, university preparation programs for educational administrators can take a lead role in putting Deming's thoughts to use in American schools. The Deming philosophy poses serious challenges to many educational practices, including, of course, the manner in which schools are managed and led. Assumptions about people, equipment, material, method, environment, and how these elements are combined to attain the outcomes of schooling all come under scrutiny as the philosophy is instituted. Still, the philosophy does not provide a model of schooling to be followed as much as it provides a pathway which leads to a never-ending cycle of improving school systems. Knowledge and understanding of this cycle furnishes administrators with a fresh perspective on the problems of schooling and with a set of principles to guide them in planning and acting to overcome those problems. Equipped with this understanding, school administrators can be the wellspring of transformation.

The Elements of the Deming Philosophy

What follows is a brief overview of the Deming philosophy. Readers are encouraged to study each of the elements described below carefully. While readers will undoubtedly recognize many familiar concepts, some are subtly different; the interactions among the elements, in particular, require

careful study. After the elements are briefly presented, further information will be provided concerning the Fourteen Points so that challenges to traditional assumptions about schooling arise through use of the philosophy. Because a lengthy description of the Deming philosophy is not provided in this paper, a section will be included on the attributes of a leader.

The concept of quality underpins the Deming management philosophy. Some aspects of traditional management, termed the Deadly Diseases (Deming, 1986), are perceived as obstacles to the improvement of quality. The diseases are: lack of constancy of purpose, emphasis on the short-term, performance evaluation, mobility of management, management by use only of visible figures, excessive medical costs, and excessive costs of liability. Another major expression of the Deming philosophy is found in the Fourteen Points. Four interrelated areas of knowledge—appreciation for a system, statistical theory (theory of variation), theory of knowledge, and psychology—form what Deming (1990) calls Profound Knowledge. Deming explains that one need not be eminent in any of these four areas to have profound knowledge but must understand each of them and their interactions.

The Plan-Do-Study-Act cycle (also referred to as the Shewhart cycle or Deming cycle) is used to act on a process (Deming, 1986). The results of the process are compared to what the customer (the individual or unit using or receiving the output of the process) needs or expects from the process. An innovation is planned or a plan to improve the process is created, and the new design is tested, preferably on a small scale. The results of the experimental process are checked and studied. If the gap between what the customer expects and what the process is producing has been reduced, then action is taken on the process to continue with the new design. The cycle is used again and again in a never-ending, upward spiral toward improved quality. Repeated use of the cycle can produce results that go beyond eliminating the gap; the output can improve to the point that it holds unexpected value for a customer.

Fourteen Points

The list of assumptions about schooling which require reexamination lengthens as an understanding of the philosophy deepens. The Fourteen Points are used

to expand this introduction to the Deming philosophy because they express the Deming management method in operational terms:

1. Create constancy of purpose for the improvement of product or service.
2. Adopt the new philosophy.
3. Cease dependence on inspection to achieve quality.
4. End the practice of awarding business on the basis of price tag alone. Instead, minimize total cost by working with a single supplier.
5. Improve constantly and forever every process for planning, production, and service.
6. Institute training on the job.
7. Adopt and institute leadership.
8. Drive out fear.
9. Break down barriers between staff areas.
10. Eliminate slogans, exhortations, and targets for the work force.
11. Eliminate numerical quotas for the work force and numerical goals for management.
12. Remove barriers that rob people of pride of workmanship. Eliminate the annual rating or merit system.
13. Institute a vigorous program of education and self-improvement for everyone.
14. Put everybody in the company to work to accomplish the transformation. (Deming, 1991)

Challenges to Conventional Assumptions

The first and fifth of Deming's points will be used to illustrate how the philosophy challenges conventional assumptions about schooling. The first point concerns purpose and confronts the tacit or implicit assumptions made about the very reason for existence of schools. Organizational purpose is a fundamental element in the philosophy because it gives direction and meaning to the behavior of all as they enact their roles. Constancy of purpose is sought by

communicating the meaning of the purpose and its central role in the work of the school at every opportunity (Moen, 1989).

An important precept of the Deming philosophy is that people derive satisfaction, and sometimes joy, from work. A corollary, which has been proposed by Deming as a purpose for schooling, is that students derive satisfaction and joy from learning. Thus, the purpose of schooling is to create conditions where students maintain and increase the joy of learning and acquire knowledge. There seems to be little joy in schools today. Nor was there much joy to be found in the schools Silberman (1970) described:

> It is not possible to spend any prolonged period visiting public school classrooms without being appalled by the mutilation visible everywhere—mutilation of spontaneity, of joy in learning, of pleasure in creating, of sense of self . . . [W]hat grim, joyless places most American schools are, how oppressive and petty are the rules by which they are governed, how intellectually sterile and esthetically barren atmosphere, what an appalling lack of civility obtains on the part of teachers and principals, what contempt they unconsciously display for children as children. (p. 10)

Silberman's passage is more than 20 years old, but does it ring false or true today? A more recent observation comes from Glasser, who has integrated Deming's principles into his vision of the quality school. Glasser (1990) cites the failure of "boss-style management, the predominant get-tough approach used in schools of coercion" (p. 28). The assumptions implicit in these joyless learning conditions are directly challenged by acceptance of the purpose of joy in learning.

Continuous improvement of processes is the subject of the fifth point, however, Deming is not satisfied with mere improvement. In *Out of the Crisis*, Deming (1986) states clearly that constancy of purpose entails an obligation to innovate: "It is thus not sufficient to improve processes. There must also be constant improvement of design of product and service, along with introduction of new product and service and new technology. All this is management's responsibility" (p. 135).

Management, adhering to the fifth point, seeks to direct the energy of people within the system toward transformation of the system. The transformation is accomplished by enlisting employees in a continuous quest to improve the ability of the system to achieve its purpose through incremental improvement or through innovation. Attention to the process is the focus. Results will follow. Emphasis is placed on the manager's "responsibility to improve the system—i.e., to make it possible, on a continuing basis, for everybody to do a better job with greater satisfaction" (Deming, 1986, p. 248-249). The foregoing challenges the assumption that a good—even excellent—school does not need improvement. All schools can be improved. All processes used in schools can be improved or replaced by innovations, by an ongoing assessment of every process (e.g., teaching, testing, teacher selection, etc.) used in the system of schooling. Obstacles to attaining the purpose are identified and removed.

Management directed mostly, or exclusively, at system maintenance, order, or control is insufficient, and therefore, unacceptable. A management style which holds teachers accountable for results but neglects the conditions which are not under teacher control, but are instead largely under managerial control or influence, is also not acceptable. A conventional assumption which suffers a great challenge is the notion that educators can improve schooling with a once-and-for-all adoption of an instructional model, a new curriculum, a different structure, or even a new set of moral or ethical values and then settle into a routine. This long-held assumption implies that administrators and teachers, but particularly administrators, can follow whatever innovation is adopted and *stop thinking* about processes.

In accordance, then, with these two points and Deming's purpose of schooling, the continuous improvement of processes is sought so that the school can better attain its purpose of fostering and enhancing the joy of learning. A serious examination of current practices gives rise to questions such as:

1. Why does the joy of learning in children lessen as they pass through school, rather than remain constant or increase?
2. What are the obstacles to improving the quality of schooling?

3. How does the practice of scheduling nearly all students for the same interval of time for learning contribute to the joy (or lack of joy) in learning?
4. Are assumptions about scheduling of instructional time appropriate for the attainment of organizational purpose?
5. Are assumptions about grouping of children into grade levels (and the attendant controversy over retention and social promotion) on the basis of chronological age, rather than developmental age, appropriate when *purpose* is considered?
6. How might scheduling and grouping processes be *redesigned* so that purpose might be better attained?

Attributes of a Leader

What must a leader be like to implement the Deming philosophy? The aim of a leader is to improve a system. Gabor (1990) reported that Deming told an automobile plant manager that his job was not to build cars, rather, his job was to work on the system (p. 234). This comment is related to Deming's assertion that the performance of teachers is greatly constrained by the system within which they work. Teachers may be exhorted to improve but cannot act on a system. Only management can act on a system. Deming rephrases and expands on Point 5 of the Fourteen Points as the aim of leadership:

> The aim of leadership should be to improve the performance of man and machine, to improve quality, to increase output, and simultaneously to bring pride of workmanship to people. Put in a negative way, the aim of leadership is not merely to find and record failures of men, but to remove the causes of failure: to help people to do a better job with less effort. (Deming, 1986, p. 248)

Joiner & Scholtes (1988) of the Center for Quality and Productivity Improvement at the University of Wisconsin-Madison term the dominant American management method as Management by Control. The shortcomings of this method include emphasis on short term results, internal competition to meet conflicting goals, false appearance of goal attainment, defensive behavior, and

the prevalence of fear within the organization. Joiner and Scholtes recommend Total Quality Leadership, their term for the Deming management system, as a better alternative. The quality management option is:

> an approach to management which focuses on giving top value to customers by building excellence into every aspect of the organization. This is done by creating an environment which allows and encourages everyone to contribute to the organization and by developing the skills which enable them to scientifically study and constantly improve every process by which work is accomplished. (p. 4)

Reflecting the most unique of Deming's contributions to managerial thought, a leader must possess knowledge of variance and be able to understand how to apply this knowledge. Deming (1986) holds that:

> a leader must learn by calculation wherever meaningful figures are at hand, or by judgment otherwise, who if any of his people lie outside the system on one side or the other, and hence are in need either of individual help or deserve recognition in some form. (p. 248)

These calculations, and the knowledge of variance which is used to give them meaning, are essential in determining if unusual performance, good or bad, is because of the system or individual ability or commitment. This knowledge guides the leader in taking action. A leader without this knowledge is as likely to be wrong as right when acting, with the best of intentions, to improve a process. In other words, a leader may praise or blame an individual when the individual's performance is a result of the system, or to modify the system when the problem or success lies within the individual.

The leader also plays an important role in fostering teamwork and collegial relationships. These relationships are needed for use of the Deming Plan-Do-Study-Act cycle and other process improvement efforts. Deming describes the leader as in a collegial relationship, "counseling and leading his people on a day-to-day basis, learning from them and with them" (Deming, 1986, p. 117). Imagine, for a moment, that the nine attributes of a leader following the Deming management philosophy listed by Gitlow (1990) are expected by the customers of educational administration programs

(students and school districts). How would we need to modify the present process (educational administration preparation programs) to narrow the gap between the attributes of graduate students and the following?

1. A leader understands how the work of his group fits the aims of the company. The purpose of this group is to support these aims.
2. He works in cooperation with preceding stages and with following stages toward optimization of the efforts of all stages. He sees his group as a link in a system.
3. He tries to create for everybody interest and challenge and joy in work. He tries to optimize the education, skills, and abilities of everyone, and helps everyone to improve. Improvement and innovations are his aim.
4. He is coach and counsel, not a judge.
5. His source of power is: (a) formal, (b) knowledge, (c) personality. A successful leader develops (b) and (c) and does not rely on (a). He has nevertheless obligation to use (a), as this source of power enables him to change the system—equipment, material, methods—to bring improvement, such as to reduce variation in output.
6. He uses plots of points and statistical calculation with knowledge of variation to try to understand the performance of himself and of his people. One aim is to try to learn how he himself can improve his leadership. Another aim is to learn who if anybody is outside the system. Simple rearrangement of the work might be the answer. Transfer to another job may require prudence and tact, as the man to be transferred may interpret this as one way to get rid of him.
7. He creates trust. He creates freedom and innovation. He is aware that creation of trust requires that he take a risk.
8. He does not expect perfection.
9. He listens and learns without passing judgment on him that he listens to.
10. He understands the benefits of cooperation and the losses from competition. (p. 33-34)

Adoption of the Deming Philosophy and the Transformation of Educational Administration Programs

Critics of educational administration programs since the late 1980s brought attention to two central problems which have afflicted educational administration programs for years: (a) an uncertain identity (associated with charges of maintaining poor relations with practitioners, irrelevance to practice, and failure to provide for the integration of theory and practice); and (b) superficiality of course content coupled with an undue emphasis on the functions of school administration.

Program reformers appear to be responding to these criticisms. Although there is considerable overlap, reform efforts can be grouped into two categories that roughly correspond to the problems cited by the critics. The first group of reform efforts identifies with the professions. This reform thrust attempts to study and learn from the models of preparation used for medical, dental, law, or business professionals. Often, practicing school administrators are invited to take part in roles traditionally occupied by professors. The roles of students and professors are sometimes altered by involving them more heavily at school sites. This orientation honors the craft and wisdom of practitioners. The second group of reforms drives toward the development of the intellectual dimension of school administration, such as philosophy, morality, and ethics, and encourages the development of alternative frames of reference. Like the professional orientation, students seek experiences in the field but for a different purpose. Emphasis is placed on the field as a source of data to be used for reflective thinking, rather than as a source of craft knowledge.

The Deming philosophy focuses on achieving higher quality by continuous improvement and innovation of the processes used in education. Without discounting either the merit of the criticisms or devaluing the progress that has been made by either group, the Deming approach is more like the latter group than the former because the primary value of the Deming philosophy lies in its power to transform schools, not just educational administration programs. The transformation of educational admin-

istration programs is necessary, but secondary, to the need for leaders of transformed schools. In other words, the Deming philosophy should be considered for use in educational administration because it responds to the problems of schooling—the gap between what is and what is needed and expected—not because it responds well to the criticisms of educational administration programs.

Summary

In its discussion of developing leaders for restructuring schools, the National LEADership Network Study Group on Restructuring Schools concludes that local needs and conditions disallow a single model for restructuring. Considering that there are "no blueprints . . ., no packaged programs or ready answers" (p. 11), they pass on their finding that educators involved in restructuring have learned to "lead with [their] hearts," rather than to depend on "canned wisdom" (Mojkowski, 1991). There are no blueprints or ready answers; the Deming management philosophy is more than these. It is a management method which has demonstrated its effectiveness in the private and public sectors of the economy. It is a perspective which is based on principles, a body of knowledge, and a method of experimentation and redesign within the local context. It is a philosophy organized around the concept of improving quality.

Educators and laypersons concerned with the stagnation and problems of the American educational system have shown increasing interest in the progress made in quality improvement using the Deming philosophy. Glasser (1990) is referring to Deming when he declares, "far better management practices [exist] than most school managers know about" (p. 2). The education of principals and superintendents about the tenets of the Deming philosophy may be the most important step that can be taken toward finding a way out of the public schooling crisis.

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CHAPTER 3

The Role of Professors in Shaping the Institutional Bases of an Educational Reform: The Case of School-Based Management

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In this chapter we report the findings of a study that was part of a larger study aimed at describing how school-based management, a prominent component of current reform efforts, was developed and promoted. The findings reported here focus on the role of college and university professors in that process.

Background

The United States, by most accounts, is in the throes of a second wave of educational reform. Characteristically, academics have responded by studying reforms that have been promoted, adopted, and implemented. One reform that has drawn considerable attention is school-based management. Although school-based management can take many forms, for the purposes of this study, the following definition was adopted: School-based management is a formal alteration of governance structures in which authority for decision making is decentralized. Decision making is delegated to individual schools. Some formal authority to make decisions in the domains of budget, personnel, and instructional program is delegated and often distributed among school-level actors, including principals, teachers, and parents (Malen, Ogawa & Kranz, 1990).

Dominant assumptions about the organization of schools have served as the bases for developing approaches to educational reform. They also have limited both the range of alternatives that have been considered and the ability to implement reforms that have been adopted (Clark, Astuto & Polen, 1991). Similarly, assumptions about school organization have framed and, thus, limited the approaches taken by scholars to studying educational reform. For the most part, research on educational reform, in general, and school-based management, in particular, has been conducted from two perspectives. First, some research has adopted a rational perspective, which is based on the assumption that organizations adopt structures to enhance the effectiveness and efficiency with which work is done. Research directed by this assumption has sought to determine the impact of school-based management on the performance of schools. Second, other research has taken a political perspective, which is based on the assumption that actors—both individual and collective—strive to influence other actors in an effort to obtain a greater share of scarce resources. Research based on this assumption has examined the legislative processes by which reform measures have been adopted.

Recently, an alternative to the rational and political perspectives on educational reform has begun to emerge. It is rooted in an institutional theory of organization.

Institutional theory holds promise as a framework for studying educational reform for two reasons. First, institutional theory seeks to explain why organizations adopt certain structural features. Because current reform efforts, including school-based management, ostensibly will "restructure" public education, institutional theory could add to an understanding of these reforms. Second, institutional theory explains that organizations sometimes adopt structures to gain legitimacy with a variety of constituents rather than to increase the efficiency of their operations. Researchers have begun to invoke institutional theory to explain the apparent failure of some widely adopted reforms, including school-based management, to produce substantive change (Cornbleth, 1986; Cuban, 1990; Malen, Ogawa & Kranz, 1990).

Theoretical Framework

Institutional theory explains that organizations do not always adopt structures—the patterns of behavior and interaction that characterize organizations—to make their technical operations more efficient (DiMaggio & Powell, 1983; Scott, 1987a; Zucker, 1987). Instead, organizations sometimes adopt structural features that mirror institutions. Institutions are general, societal rules which take the form of cultural theories, ideologies, and prescriptions (Meyer, Boli & Thomas, 1987). They specify appropriate organizational purposes as well as legitimate means for attaining those purposes (Meyer & Rowan, 1977; Zucker, 1987; Scott, 1987a).

Organizations, such as public school systems, that do not possess clear technologies (DiMaggio, 1988) and do not operate in competitive markets (DiMaggio & Powell, 1983) are especially prone to adopting structures that mirror institutions. For, by doing so, they can gain legitimacy with stakeholders in their environments (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1987a; Zucker, 1987) without necessarily having to demonstrate the efficiency of their technical operations. To the extent that legitimacy inclines stakeholders to invest resources in organizations, it contributes to organizations' survival or effectiveness (DiMaggio & Powell, 1983).

Institutional theory has been criticized for offering a view of organizations devoid of a human element (DiMaggio, 1988) because it emphasizes the press of an amorphous environment rather than the will of specific actors as the source of organizational structures. Theorists have responded by adopting the concepts of agency and interest, thus acknowledging that agents, or social actors, pursue their interests, or goals, in institutional contexts (DiMaggio, 1988; Scott, 1987a). Agency and interest can operate at several levels: in organizations' environments, at the boundaries between organizations and their environments, and within organizations. Here, only the level of organizations' environments is discussed as it was the level on which this study focused.

According to institutional theory, the structural elements that organizations adopt in order to gain legitimacy, like the institutions that they reflect, have their source in the environment. Agents, both individual actors and

organizations, function as "institutional entrepreneurs" to institutionalize structural elements that advance their interests (DiMaggio, 1988). Professions have been identified as one of two primary types of agents, nation-states being the other, that pursue the institutionalization of particular structural elements (Scott, 1987a). Because colleges and universities serve as vehicles for shaping and transmitting professional norms, professors in universities' professional schools might well play important roles in institutionalizing structural elements that gain widespread adoption by organizations employing substantial numbers of professionals.

Institutional theory also suggests that agents may be elements of social networks. For, according to institutional theory, "the environments of organizations are themselves organized. . ." (Scott, 1987b, p. 129). One aspect of that organization consists of networks that link both individual and organizational actors. Thus, from the institutional perspective, entrepreneurs who work to institutionalize particular structural forms may well work in and through social networks. That is, they may well be organized, if even loosely so.

Purpose and Research Questions

The study reported in this paper was a part of a larger study, the purpose of which was to examine how school-based management was developed and promoted in the United States. The narrower purpose of the study reported here was to examine the role of university and college professors in that process. This study was guided by the following questions:

1. Were professors involved in institutionalizing school-based management? If so, what role(s) did they play?

2. To what extent and in what ways were professors, who were involved in shaping and promoting school-based management, embedded in networks linking them with other professors, professional organizations, governmental agencies and the like?

Research Procedures

The study was conducted in two stages: an archival analysis and an exploratory case study. This two-stage strategy has been employed previously to describe and examine loosely organized domains (Faulkner, 1987).

Archival Analysis

The analysis of documents contained in archives can shed light on the who, what, and where of social phenomena (Yin, 1989). To determine which professors were involved in shaping and promoting school based management, documents on that subject were analyzed. Documents published prior to December 1990 were collected. The following procedures were employed to locate and obtain documents. A computer search, bibliographies, literature reviews, and three publications that report new policies and practices in schools were consulted to identify individuals, organizations, and agencies associated with school-based management. In addition, after an initial analysis of documents was completed, a variety of educational organizations and agencies, including the American Association of School Administrators, the American Federation of Teachers, the Carnegie Forum, the National Education Association, the National Association of Secondary School Principals, and the National Governors Association were contacted in order to obtain documents concerning meetings, workshops, and other events that were focused on school-based management.

Documents were analyzed to identify individuals associated with school-based management. The analysis determined the frequency with which individuals were noted, their positions (e.g., professor, policy analyst, project director, independent researcher) and their organizational affiliations (e.g., university, school district, governmental agency, legislative body, policy center). In addition, events pertaining to school-based management (e.g., meetings, workshops, conferences) were identified. A timeline was constructed to describe the chronological relationships among individuals, organizations, and events. This archival analysis produced a general map of individuals and events associated with school-based management and their relationships. It served as the basis for the second stage of the proposed study: an exploratory case study.

Exploratory Case Study

The case study method is appropriate for determining the how and why of phenomena (Yin, 1989). This study sought to determine how professors

were involved in shaping and promoting school-based management. To answer this question, a case study was conducted.

Data collection. Data were collected through non-standard, scheduled interviews (Richardson, Dohrenwend, & Klein, 1965). Individuals identified in the document analysis served as respondents. After the completion of the initial round of interviews, a snowball sampling procedure was followed to identify other respondents. Twenty-three individuals were interviewed: 13 professors, 1 research editor of a non-profit research firm, 1 independent research-consultant, 3 presidents of local teachers unions, 1 president of a national teachers union, 2 directors of projects sponsored by national teachers organizations and 4 officials of national organizations with interests in education.

Respondents initially were contacted by letter. The letter described the study and invited respondents' participation. Follow-up telephone calls were made to prospective respondents, during which respondents' questions about the study were answered and appointments for interviews were set. Interviews were conducted by telephone and, on average, lasted one-half hour. Interviews were recorded on cassette tapes and transcribed.

Development of an interview guide was based on the findings of the initial document analysis and on the research questions guiding the study. Thus, interviews focused on the following issues: the respondents' activities regarding school-based management, how and when they initially became involved, other actors (both individuals and organizations) with whom they were involved, what they had hoped to accomplish, what groups or organizations they represented, and how school-based management became a prominent element of national efforts to reform public education.

Data Analysis. Interview data were analyzed by employing the following procedures. Initially, we coded patterns in respondents' descriptions of their involvement in school-based management and the purposes of their involvement (Miles & Huberman, 1984). As coding proceeded, interpretive memos were compiled. This resulted in the development of a series of propositions regarding patterns in interviewees' responses. Guided by the propositions, data were displayed in tables to determine and verify the existence of patterns. Analysis moved through continuous cycles of

arriving at findings and searching for confirming or disconfirming evidence (Glaser & Strauss, 1967). Corroboration of findings was sought both across respondents and between interview and documentary data.

A qualitative network analysis (Granovetter, 1973) also was conducted. It involved two steps. First, we traced links between actors, both individuals and organizations. A link was considered to exist under two conditions: a) if one member of a relationship reported it in his/her interview or b) if an interviewee described a relationship between two other actors. Second, we assessed the strength of linkages, or ties, between actors. The strength of a tie was assessed by determining the number of common ties that the two actors had with other members of the network (Granovetter, 1973). For example, if two individuals had three common associates, their relationship would be deemed stronger than if they had fewer than three common associates. The network analysis produced a sketch of the pattern of relationships, or organization, in which professors who participated in institutionalizing school-based management were located.

Findings

The findings are presented in three parts. First, we describe the role that professors played in contributing to the institutionalization of school-based management. Second, we trace the social network in which those professors operated. Finally, we discuss the relationship between the location of professors in that network and their roles in the effort to institutionalize school-based management.

Professors' Role

Were professors involved in institutionalizing school-based management? If so, what role(s) did they play? The answers to these questions are twofold. First, professors did *not* play one role: the institutional entrepreneur. Second, there is the matter of a role that professors did play: the disseminator of information.

The Role Not Played: The Institutional Entrepreneur. Professors did not serve as the chief agents, or institutional entrepreneurs, who shaped and promoted school-based management. This is evident in both documentary and interview data.

The first indication that professors did not play the role of entrepreneur came from a time-line that was produced by the analysis of documents. This time-line recorded the year in which documents were published and key events occurred as well as the individuals associated with the documents and events.

The chronological sequence of publications and events charted by the time-line strongly suggests that professors responded to, rather than initiated, efforts to shape and promote school-based management. According to documents and interviewees, 1986 was a watershed year. In 1986, the Carnegie Forum on Education and the Economy published *A Nation Prepared*, and the National Governors Association published *Time for Results*. Both reports, especially the former, were cited repeatedly in documents as having precipitated the movement to restructure schools, generally, and efforts to promote school-based management, specifically. The importance of the publication of these reports in 1986 is underscored by the fact that the two districts whose school-based management plans received the most attention in publications—Dade County and Rochester—initiated their programs in 1987 and 1988, respectively, and had linkages with the Carnegie Forum.

Using 1986, then, as a guidepost, a pattern in the publication of articles on school-based management in academic and professional journals reveals the relatively late involvement of professors. Academic journals publish articles that either report the findings of empirical research or build theory and are aimed at academic readerships (e.g., *Educational Administration Quarterly, Educational Evaluation and Policy Analysis*). The vast majority of articles published in these journals are authored by professors. Professional journals publish articles on timely topics, often drawing on empirical research, and are aimed at academic and professional practitioner readerships (e.g., *Educational Leadership, Phi Delta Kappan*). Again, professors account for a majority of the articles appearing in these journals.

The time-line reveals that in 1988, two years after the watershed year of 1986, the number of articles on school-based management published in

academic and professional journals began to increase dramatically. From 1969 through 1985, 25 articles on school-based management were recorded, none of which discussed school-based management as a form of restructuring. Only four articles were recorded for each of the years 1986 and 1987. Then, in 1988, the number of articles increased dramatically to 18. In 1989, the number grew to 20; in 1990, the number nearly doubled to 38. Even allowing for the time lag between the writing and publishing of articles, the publication pattern reflected in the time-line indicates that professors were reacting to school-based management initiatives rather than shaping and promoting them. This strongly suggests that professors were not acting as institutional entrepreneurs.

Interview data corroborate what the documentary data suggest. Professors reported two reasons for their having become associated with school-based management. Both indicate that professors reacted to school-based management. First, many professors became interested in school-based management only after the existence of school-based management programs in school districts had been brought to their attention. In fact, 8 of the 13 professors who were interviewed reported that such had been the case for them. For example, one professor, in describing how she came to write an article on school-based management, noted, "I worked with some students who were working with site-based management in their school, and I met with a principal and a team of teachers who were looking at the concept. . . ." Another similarly reported that the superintendent and teacher union president from a school district that was implementing a school-based management program asked him to conduct a study of their program. This pattern in which professors followed the lead of practitioners was evidenced on another level. A professor who was involved with a national policy center explained that "The [center's] agenda was very much trying to understand what was going on in education reform. . . ."

Second, a few professors began to pay attention to school-based management because it suited their scholarly interests. Three of the professors who were interviewed saw school-based management as having merely emerged as one part of the bigger picture of school reform. For example, one reported, "I was . . . interested in choice as a way not only to restructure schools in educational terms but in governance terms . . . and . . . I believe

that a great many of the features that school-based management introduces . . . are present in choice. I came to it . . . in [that] context." For five of the professors, school-based management provided an opportunity to pursue conceptual issues in which they were interested. For example, one commented: ". . . my interest isn't site-based management as site-based management. I'm interested in the issue of systemic change. . . ." Another offered, "My background is I'm an economist." He continued, "Economists look at schools as firms . . . I came back to that issue, well in part looking at restructuring . . . but more interested in seeing how decentralization would affect the cost of schooling."

Interview data also provide a more direct indication that professors were not among the entrepreneurs who pushed school-based management. Most respondents, professors and non-professors alike, reported that professors did not initiate efforts to shape and promote school-based management. Non-professors were particularly direct in addressing this issue. The president of a local teachers union characterized the role of academics in the following way: "They were low man on the totem pole, unfortunately. I say that because they should have been out front, and there was just no interest there to begin with." Another union leader echoed this point: "I think that [professors] were on the sidelines. . . ."

While professors generally were less direct, they nevertheless strongly implied that they and their colleagues had not taken the lead in promoting school-based management. Although professors did not describe themselves as not acting as the chief agents of school-based management, neither did they list themselves among the chief agents. They, instead, identified non-professors: the president of the American Federation of Teachers (AFT), presidents of local affiliates of the AFT, staff members of the Carnegie Forum on Education and the Economy and the National Governors Association, and administrators and teachers in local school districts. For example, a professor who was often cited by documents on school-based management commented: "Academics, I just don't know the academics who work in this area, and that is why I was skeptical . . . . Anyway, I think it boils down to a handful of serious practitioners who are doing as many different things as there are people." Another prominent professor reported, "I think Al Shanker's leadership certainly brought the

AFT into the spotlight about seven or eight years ago, and he used [another professor] and I as kind of shills for the union, because we were academics so we had credentials. . . ."

The Role Played: Disseminator of Information. Although professors did not function as entrepreneurs, they did play an important, secondary role in shaping and promoting school-based management. Both documentary and interview data reveal that professors disseminated information about school-based management. The information that they disseminated took three forms. First, a few professors, who worked directly with institutional entrepreneurs, collected and disseminated information at the request of entrepreneurs. Second, professors published articles and book chapters in which they reported the findings of their research or analyzed reform efforts, often drawing on their research. Third, professors published articles in which they offered advice to practitioners who might be interested in adopting and implementing school-based management programs.

Working with the entrepreneurs. A small number of professors were directly engaged by entrepreneurs promoting school-based management as a part of their larger restructuring agenda. Two of the professors who were interviewed reported that they had this type of relationship with entrepreneurs. These professors indicated that entrepreneurs engaged them to collect and disseminate information about school reform. For example, as noted above, one professor characterized herself as a "shill" for the President of the AFT. Another explained that he was asked by a staff member of the National Governors Association to write-up the proceedings of a conference on educational reform sponsored by that group and financed by the Carnegie Foundation.

Reporting research and critical analyses. By far the largest number of professors who participated in shaping and promoting school-based management did so by writing articles and chapters that either reported the findings of their research or critically analyzed school-based management, often drawing on their research for analytical grist. The vast majority of documents on school-based management that were authored by professors fell into this category. This was substantiated by interview data. Eleven of the 13 professors who were interviewed reported that they had written articles and chapters of this type.

This finding, in and of itself, reveals little about the role that these professors played in the institutionalization of school-based management. However, a related finding is more revealing. It concerns the journals in which professors published their writing on school-based management. Over half of the articles written by professors were published in professional journals whose readerships include high proportions of educational practitioners. Some of these journals are published by practitioner organizations. For example, *The School Administrator* is published by the American Association of School Administrators, the national organization of school superintendents. Other journals are published by organizations that do not represent any particular group of educational practitioners but nonetheless have numbers of practitioners among their members. For example, the *Phi Delta Kappan* is published by Phi Delta Kappa, an honorary society for professional educators. Consequently, while professors may not have led efforts to shape and promote school-based management, they kept many practitioners informed about school-based management through the articles that they wrote and published in professional journals.

Offering practical advice. Finally, a small number of professors wrote and published articles that provided practical advice about implementing school-based management to educational practitioners. The vast majority of the documents of this type were written by practitioners—teachers, principals, and superintendents—who have had experience in implementing school-based management. But, a few were written by professors. This, too, was corroborated by interview data. Just two of the 13 professors who were interviewed had written articles offering practical advice to educational practitioners. The three articles that were authored by these professors appeared in *NASSP Bulletin*, a journal published by the National Association of Secondary School Principals.

The Network

To what extent and in what ways were professors who were involved in shaping and promoting school-based management enmeshed in a network linking them with other professors, professional organizations, governmental

agencies and the like? The general answer to that question is that professors who disseminated information about school-based management generally were located in a network. Moreover, the findings provide three specific answers regarding the characteristics of that network and the location of professors in it: a) the scope of the network; b) the pattern of the strength of ties in the network; and c) a national policy center at the network's hub.

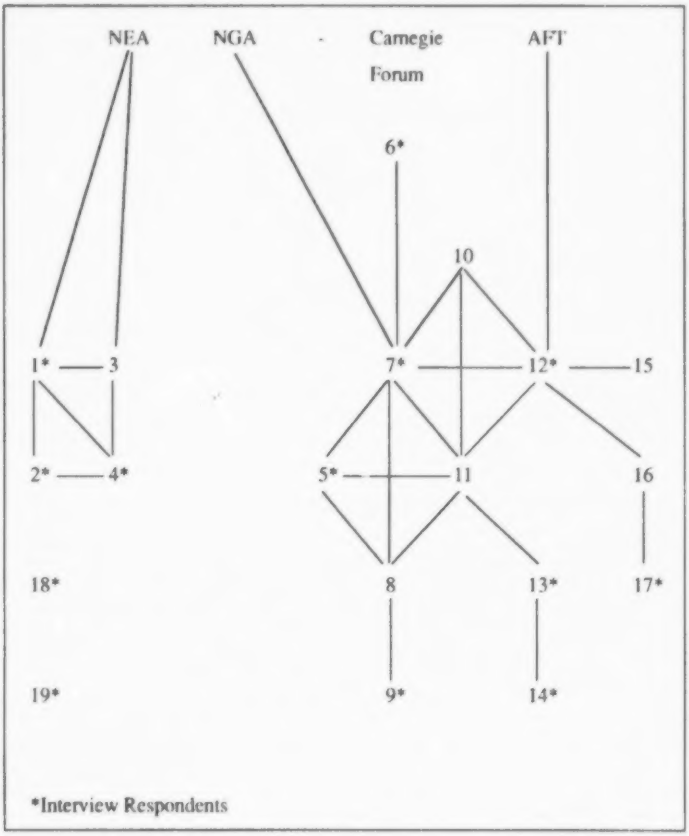
Scope of the Network. The professors who disseminated information about school-based management generally were bound by a loose network (see figure 1). The existence of a network is indicated by the fact that 11 of the 13 professors who were interviewed were linked to at least one other professor who was interviewed. Only professors 18 and 19 were not linked with any members of the network.

The discovery of a network that linked professors who were noted in documents on school-based management and, thus, interviewed for this study, however, was just a starting point. For, as figure 1 shows, that network was embedded in a much larger one. The extended network's scope was broader in two ways. First, it included professors who were not prominent in the documents on school-based management. Despite their absence from the documents, these professors, according to several respondents' accounts, played central roles in developing the national research agenda on school reform. For example, one individual (11) who was not referenced in documents on school-based management was the director of a national policy center that supported and disseminated much of the research and other academic writing on school-based management. Another individual (8), who was similarly absent from documents on school-based management, was identified by several interviewees as having been instrumental in the development of that same policy center and as a leading scholar on the topic of educational reform. The policy center in which both of these individuals were involved will be discussed further in a later section of this paper.

Second, the extended network reached beyond academic circles. It included actors associated with organizations that were identified in the larger study as being among the chief institutional entrepreneurs behind school-based management. Note that one professor (7) was linked to the National Governors Association and through that organization to the Carnegie Forum on

Education and the Economy. Also, another professor (12) was tied directly to the American Federation of Teachers. The extended network also touched the National Education Association (NEA), which, although not found to be among the chief entrepreneurs of school-based management, was part of the presence of the teaching profession in shaping the educational reform agenda. Two professors (1 and 3) were directly linked with the NEA.

Figure 1
Network of Professors



Varying Strength of Network Ties. Within the extended network described above, the strength of ties between professors varied from strong to weak; the strength of ties ranged from one dyad that shared three common associates to several dyads that shared no common associates. For example, the 7-11 dyad had three common associates; the 5-8 dyad had 2 common associates; the 1-2 dyad had just 1 common associate; and the 4-5 dyad had no common associates. Figure 1 also reveals that no ties existed between several actors; that is, no mention was made by interview respondents of a connection between two actors.

There was also an apparent pattern in the strength of ties that characterized the extended network. The pattern marks two subsets of professors within the network and indicates that the two subsets are linked by a weak tie. All ties in each subset share at least one common associate; that is, each tie has some strength. No other possible subset of professors is linked by a system of ties of that strength. The first subset has 4 members: professors 1, 2, 3, and 4. We characterized it as the administration subset, because 3 of its members (1, 2, and 4) are professors in departments of educational administration. The second subset has 6 members: professors 5, 7, 8, 10, 11, and 12. We characterized it as the policy center subset because four of its members (professors 5, 7, 8, and 11) were identified as having been instrumental in developing and operating a national center for educational policy research, which was supported by the United States Department of Education's Office of Educational Research and Improvement (OERI), and one (professor 11) was the director of that center.

The network analysis also suggested the possible importance of weak ties. Weak ties are those that link two individuals who share no common associates. The network's two subsets were linked by a single weak tie between professors 4 and 5. Weak ties were prominent in another way. They directly linked 3 professors (6, 9, and 13) to the second, or policy center, subset.

The Network's Hub: A National Center for Policy Research. The structure revealed by the pattern of the strength of ties described above indicates that the policy center subset may well lie at the network's hub. This is suggested by two of the policy center's features: its density and its

centrality. The density of the policy center network subset is determined by the number of its members and the strength of the ties that bound them. As noted above, 6 professors were included in this subset, nearly one-third of all the professors in the network. Moreover, the ties that bound the members of this subset were relatively strong. One dyad (7-11) had the strength of 3 common associates; four dyads (5-7, 5-8, 7-8, and 7-10) had strengths of 2; and 2 (7-12 and 10-12) had strengths of 1. By comparison, no dyads outside of this subset were bound by ties with a strength of 3 and only one dyad outside of this subset was bound by a tie with a strength of 2.

The centrality of the policy center subset is also apparent. The one other subset in the network—the administration subset—was linked to the policy center subset by a weak tie. In addition, five professors were directly linked to the policy center network by weak ties, and two of the four professors without direct ties to either subset were linked indirectly to the policy center subset. Finally, the policy center subset was linked, albeit through weak ties, to those organizations that were identified by the larger study as among the chief institutional entrepreneurs who shaped and promoted school-based management.

The Network and The Role of Professors

In answering the two questions that guided this study, we arrived at the following answers. Professors did not act as chief institutional entrepreneurs who shaped and promoted school-based management but did disseminate three types of information about school-based management. And, those professors were enmeshed in a network with a discernible structure which was defined by the pattern of the strength of ties. When taken together, these answers—which themselves must be treated as tentative—suggest that the type of information disseminated by professors may be related to their location in the network. The relationship, needless to say, remains very sketchy.

One type of information that professors disseminated was information that was linked directly to institutional entrepreneurs. Professors served as "shills" for the entrepreneurs and authored reports summarizing events sponsored by entrepreneurs. The two professors who served this function

(7 and 12) were members of the policy center subset which lay at the hub of the network of professors. Moreover, both apparently were individual hubs in their subset and in the network; they were among the individuals with the most ties to other members of the network. Professor 7 had 7 ties, more than any other individual in the network; professor 12 had 5 ties, a number that was matched only by professor 11.

A second type of information that professors disseminated included the findings of research and critical analyses, often based in part on research. The professors who disseminated this type of information were located in one of two positions in the network. First, many were members of one of the network's two subsets. The four members of the administration network had written research reports or critical analyses, or both, as did three members of the policy center network (5, 7, and 12). Second, some were linked to the policy center network through weak ties. Such was the case for professors 6, 9, and 13.

The final type of information that professors disseminated was advice to educational practitioners. The professors (18 and 19) who wrote articles containing this type of information were not linked to the network. Although both were members of departments of educational administration, neither were identified as being tied to any member of the administration subset.

Discussion

Due to the exploratory approach taken in conducting this study, its findings raised many questions and provided few, if any, clear answers. Thus, the discussion that follows focuses on several sets of questions raised by the findings of this study. The questions concern two general topics: the role of professors in shaping educational issues and the informal organization of professors in networks.

There is a long-standing belief among academics that research should inform, if not drive, educational policy and practice. This is evidenced by the sensitivity of educational researchers to criticisms that their research lacks utility (see, for example, Shavelson, 1988). In the past, discussions of this issue have focused on the impact of research on federal, state, and

local policy makers and on the practice of individual educational practitioners. The perspective that guided the study reported in this paper raises the ante by placing the focus on the institutional environment in which policy making bodies, educational organizations, and practitioners operate.

If, as institutional theory suggests, decisions made by policy making bodies and organizations are affected by institutions, or societal rules, then the issue of the impact of research on educational policy and practice takes on a much broader scope. The question, then, becomes: How does research help to shape institutional rules? Assuming that professors make a significant contribution to the body of educational research, the findings of the present study suggest that research may play only a secondary role in shaping educational issues in the institutional environment. This is consistent with a study of the business sector, which found that conceptions of organizational culture migrated from the practitioner literature to the scholarly literature (Barley, Meyer & Gash, 1988). However, the findings reported here were produced by a single case study of the institutional sources of one reform. Moreover, it revealed that the dynamics of institution building were extremely complex. Thus, the question of the impact of professors and research on the process by which institutions are shaped remains to be answered.

While we acknowledge that the findings reported here are tentative, they do point to a more specific question about the role of professors in shaping and promoting educational issues. The study revealed that professors disseminated three forms of information about school-based management. This raises a question not addressed by this study: what role does the dissemination of information by professors play in the process of institutionalization? One possibility is that such information legitimates that which entrepreneurs seek to institutionalize. Recall that one interviewee observed that the words of professors carry weight because they are backed by academic credentials. This is consistent with research in other domains. For example, a study of federal policy making found that the collection of information and the information, itself, legitimated decisions without having substantively affected decision outcomes (Feldman, 1989).

This study found that professors who disseminated information about school-based management generally were bound by a network and that the network had certain structural characteristics. These findings raise several questions.

The first is the general question: Are professors linked by networks? The findings of the present study suggest that the answer is "yes." However, additional research employing more comprehensive samples of professors is needed before this question can be answered conclusively.

Assuming for purposes of discussion that professors are enmeshed in networks, several, more specific questions are suggested by this study's findings. Two findings indicated that networks may affect the opportunities that professors have to engage in scholarship. One finding revealed that a professor's placement in the network may have been related to the type of information that the professor published; another revealed that many professors were linked by weak ties to the subset of professors at the hub of the network. Research has shown that networks can provide opportunities to members that may not be available to outsiders (Granovetter, 1974). This seems to beg the question: How do networks affect the distribution of opportunities available to professors?

Two findings also suggested that weak ties (those in which members of a dyad shared no common associates) may be important to the functioning of the network: the two subsets found in the network were connected by a weak tie, and several professors were linked to the central subset of the network by weak ties. In a study that examined how individuals learned about and obtained jobs, Granovetter (1974) found that individuals who were connected by strong ties tended to share the same information while those connected by weak ties tended to have different information. This raises the question: Is the strength of ties that link professors related to the similarity of the information or perspectives that professors possess? The answer to this question may have interesting implications. For example, if such a relationship is found to exist, how might the existence of networks limit the divergence of views deemed acceptable in a field of study?

Finally, the present study hints at the existence of a relationship between the informal structure of networks and formal organizational analogues.

One finding indicated that the members of the subset at the hub of the network had been instrumental in the development and operation of a center for policy research. The members of the central subset were linked prior to the development of the center. This raises the general question: What is the relationship between the informal relationships of networks and the formal structures of organizations? It also raises more specific questions. For example, given the sequence just described: Under what conditions do informal networks evolve into formal organizations?

Notes

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